

Form PTO-1390 (Rev. 12-2004) TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371		US PATENT AND TRADEMARK OFFICE; US DEPARTMENT OF COMMERCE ATTORNEY'S DOCKET NO. C 2747 PCT/US U.S. APPLICATION NO. (If known, see 37 CFR 1.57) 107539737
INTERNATIONAL APPLICATION NO. PCT/EP2003/013977	INTERNATIONAL FILING DATE December 10, 2003	PRIORITY DATE CLAIMED December 19, 2002
TITLE OF INVENTION METHOD FOR PRODUCING LIGHT COLOURED POLYALKYLENE GLYCOL DIETHYL ETHER OF FATTY ACID ALKANOLAMINE		
APPLICANT(S) FOR DO/EO/US Ansgar BEHLER and Almud FOLGE		
<p>Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:</p> <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. 2. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. 3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. 4. <input type="checkbox"/> The US has been elected (Article 31). 5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) <ol style="list-style-type: none"> a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau). b. <input checked="" type="checkbox"/> has been communicated by the International Bureau. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). 6. <input checked="" type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). <ol style="list-style-type: none"> a. <input checked="" type="checkbox"/> is attached hereto. b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4). 7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) <ol style="list-style-type: none"> a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> have been communicated by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input checked="" type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> A English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)) (EXECUTED). 10. <input type="checkbox"/> A English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). <p>Items 11 to 20 below concern document(s) or information included:</p> <ol style="list-style-type: none"> 11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. <input type="checkbox"/> A preliminary amendment. 14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76. 15. <input type="checkbox"/> A substitute specification. 16. <input type="checkbox"/> A power of attorney and/or change of address letter. 17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821-1.825. 18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4). 19. <input type="checkbox"/> A second copy of the English language translation of the International application under 35 U.S.C. 154(d)(4). 20. <input checked="" type="checkbox"/> Other items or information: Information Disclosure Statement <p>"Express Mail" Mailing Label Number <u>EV530260453US</u>.</p>		

U.S. Application No. (if known) see 37 CFR 1.5) 10 4539737		INTERNATIONAL APPLICATION NO. PCT/EP2003/013977		ATTORNEY'S DOCKET NUMBER C 2747 PCT/US									
<p>21. The following fees are submitted:</p> <table> <tr> <td><input checked="" type="checkbox"/> a) Basic national fee.....</td> <td>\$ 300.00</td> </tr> <tr> <td><input checked="" type="checkbox"/> b) Examination fee.....</td> <td>\$ 200.00</td> </tr> <tr> <td><input checked="" type="checkbox"/> c) Search fee - search report prepared and provided to USPTO.....</td> <td>\$ 400.00</td> </tr> <tr> <td colspan="2">TOTAL OF ABOVE CALCULATIONS = \$ 900.00</td> </tr> </table>						<input checked="" type="checkbox"/> a) Basic national fee.....	\$ 300.00	<input checked="" type="checkbox"/> b) Examination fee.....	\$ 200.00	<input checked="" type="checkbox"/> c) Search fee - search report prepared and provided to USPTO.....	\$ 400.00	TOTAL OF ABOVE CALCULATIONS = \$ 900.00	
<input checked="" type="checkbox"/> a) Basic national fee.....	\$ 300.00												
<input checked="" type="checkbox"/> b) Examination fee.....	\$ 200.00												
<input checked="" type="checkbox"/> c) Search fee - search report prepared and provided to USPTO.....	\$ 400.00												
TOTAL OF ABOVE CALCULATIONS = \$ 900.00													
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.													
Total Sheets	Extra sheets	Number of each additional 50 or fraction thereof (round up to a whole number)		RATE									
XX - 100 =	XX/50 =	0		x \$250.00	\$ 0								
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).													
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE										
Total Claims	20 - 20 =	0	0 X \$50.00	\$ 0									
Independent Claims	3 - 3 =	0	0 X \$200.00	\$ 0									
MULTIPLE DEPENDENT CLAIMS (S) (if applicable)			0	+ \$360.00	\$ 0								
TOTAL OF ABOVE CALCULATIONS = \$ 900.00													
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.													
SUBTOTAL = \$ 900.00													
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).													
TOTAL NATIONAL FEE = \$ 0													
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +													
TOTAL FEES ENCLOSED \$ 900.00													
<table> <tr> <td>Amount to be refunded:</td> <td>\$-----</td> </tr> <tr> <td>Amount to be charged:</td> <td>\$ 900.00</td> </tr> </table>						Amount to be refunded:	\$-----	Amount to be charged:	\$ 900.00				
Amount to be refunded:	\$-----												
Amount to be charged:	\$ 900.00												
<p>a. <input type="checkbox"/> A check in the amount of \$_____ to cover the above fees is enclosed.</p> <p>b. <input checked="" type="checkbox"/> Please charge my Deposit Account No. <u>50-1177</u> in the amount of <u>\$ 900.00</u> to cover the above fees.</p> <p>A triplicate copy of this sheet is enclosed. Order No. <u>05-0239</u>.</p> <p>c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>50-1177</u>. A triplicate copy of this sheet is enclosed.</p> <p>d. <input type="checkbox"/> Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.</p> <p>NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the International Application to pending status.</p>													
SEND ALL CORRESPONDENCE TO: Customer Label No. 23657													
 SIGNATURE													
<u>Arthur G. Seifert</u> NAME ATTORNEY FOR APPLICANT <u>28,040</u> REGISTRATION NUMBER													

10539737

(12) NACH DEM VERTRÄG ÜBER DIE INTERNATIONALE ZUSAMMENARBEIT AUF DEM GEBIET DES
PATENTWESENS (PCT) VERÖFFENTLICHTE INTERNATIONALE ANMELDUNG

(19) Weltorganisation für geistiges Eigentum
Internationales Büro



(43) Internationales Veröffentlichungsdatum
8. Juli 2004 (08.07.2004)

PCT

(10) Internationale Veröffentlichungsnummer
WO 2004/056743 A1

(51) Internationale Patentklassifikation⁷: C07C 231/12

[DE/DE]; Siegfriedstr. 80, 46240 Bottrop (DE). CLASEN,
Frank [DE/DE]; Hagelkreuzstr. 22, 40721 Hilden (DE).

(21) Internationales Aktenzeichen: PCT/EP2003/013977

(81) Bestimmungsstaaten (*national*): JP, US.

(22) Internationales Anmelde datum:
10. Dezember 2003 (10.12.2003)

(84) Bestimmungsstaaten (*regional*): europäisches Patent (AT,
BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,
HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).

Erklärung gemäß Regel 4.17:

— Erfindererklärung (Regel 4.17 Ziffer iv) nur für US

Veröffentlicht:

— mit internationalem Recherchenbericht

Zur Erklärung der Zweibuchstaben-Codes und der anderen Abkürzungen wird auf die Erklärungen ("Guidance Notes on Codes and Abbreviations") am Anfang jeder regulären Ausgabe der PCT-Gazette verwiesen.

A1

(54) Title: METHOD FOR PRODUCING LIGHT COLOURED POLYALKYLENE GLYCOL DIETHYL ETHER OF FATTY ACID ALCANOLAMINE

WO 2004/056743 A1

(54) Bezeichnung: VERFAHREN ZUR HERSTELLUNG HELLFARBIGER FETTSÄUREALKANOLAMIDPOLYALKYLENGLYCOLEATHER

(57) Abstract: The invention relates to the production of light coloured polyalkylene glycol diethyl ether of fatty acid alcanolamine by adding ethylene on fatty acid alcanolamine in the presence of alkaline catalysts. The inventive method consists in alkoxylating in the presence of reducing agents and in treating the obtained products by water vapour in alkaline media.

(57) Zusammenfassung: Vorgeschlagen wird ein Verfahren zur Herstellung von hellfarbigen Fettsäurealkanolamidpolyalkylen-glycolethern durch Anlagerung von Alkylenoxiden an Fettsäurealkanolamide in Gegenwart alkalischer Katalysatoren, welches sich dadurch auszeichnet, dass man die Alkoxylierung in Gegenwart von Reduktionsmitteln durchführt und die auf diesem Wege erhaltenen Reaktionsprodukte anschliessend einer Wasserdampfbehandlung unter alkalischen Bedingungen unterwirft.